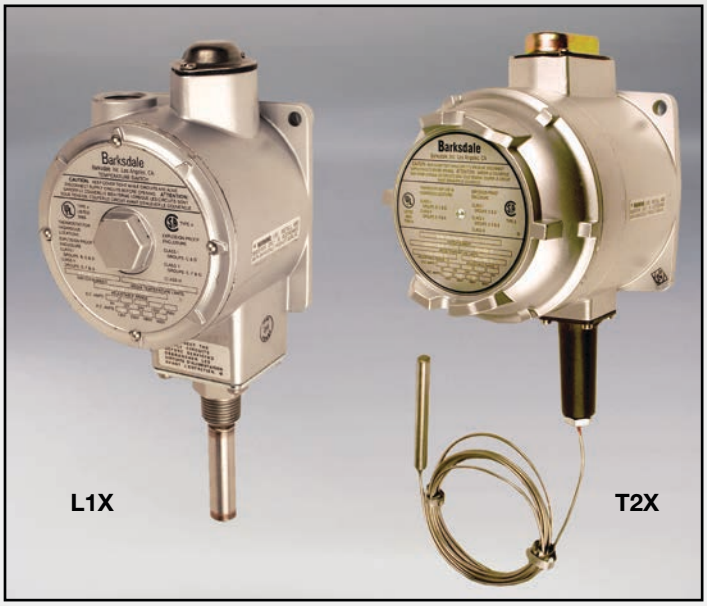
Explosion Proof Temperature Switches *Series T1X, T2X, L1X*

Features

- Explosion-proof for hazardous locations
- High accuracy
- Remote, local or ambient sensing
- UL, CSA & ATEX approved
- NEMA 4, 7, 9 & IP66

Applications

- Oil & gas
- Heat tracing
- Printing machinery
- Compressors
- Process equipment
- Machine tools and industrial equipment



General Specifications*

Accuracy: (Repeatability)	±1% of mid-60% of full range. At constant ambient +/- 0.5% of full scale. (Knob indication is reference only)
Switch: Single Setting: Dual Setting:	 One (1) single pole double throw (SPDT) circuit. Two (2) independent single pole double throw (SPDT) circuits.
Electrical Characteristics:	All models incorporate Underwriters' Laboratories, Inc. and CSA listed single pole double throw snap-action switching elements. Switches may be wired normally open or normally closed.
Wetted Parts:	304 stainless steel
Electrical Connection:	Single: 3-pin terminal strip Dual: 6-pin terminal strip
Electrical Ratings:	AC value at 75% power factor —10 amps 125, 250 volts AC, 3 amps 480 volts AC. Automatically reset by snap-action of switch.
Enclosure/Housing:	Class I, Division 1 & 2 NEMA 4, 7, & 9 Tamper-proof external adjustment, enclosed terminal strip.

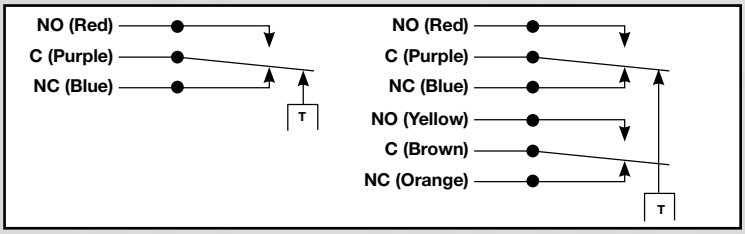
Local Mount:	Immersion length 2-1/16 inches
Bulb & Capillary:	6 foot length standard.
Approvals: UL (standard): CSA (standard): ATEX (optional):	Underwriters' Laboratories, Inc. and Canadian Standard Assoc. are listed under Temperature indicating and regulating equipment, for use in hazardous locations, Class I, Groups B, C and D; Class II, Groups E, F and G. File No. E58658, Guide No. XBDV File No. LR34556, Guide 400-E-O.8. Class 4868. EX models are ATEX marked as follows: CE 0081, ISSeP 08 ATEX024X II 2 G D, Ex db II C T6 Gb Ex tb IIIC T80°C Db IP66 -40°C ≤ Tamb ≤ +75°C
Temperature Range:	See product configurator
Adjustment:	Tamper resistant external adjustment. Turn knob clockwise to increase setpoint. (Knob indication is reference only)
Standard Options/ Modifications:	For thermowels, split nuts and union connections, see accessory pages.
Weight:	Single - approximate 4.0 lbs. Dual - approximate 4.5 lbs.

* See Product Configurator for additional options.

Wiring Code

Lead	Circuit #1	Circuit #2
Normally Closed	Blue	Orange
Common	Purple	Brown
Normally Open	Red	Yellow

Wiring Diagram



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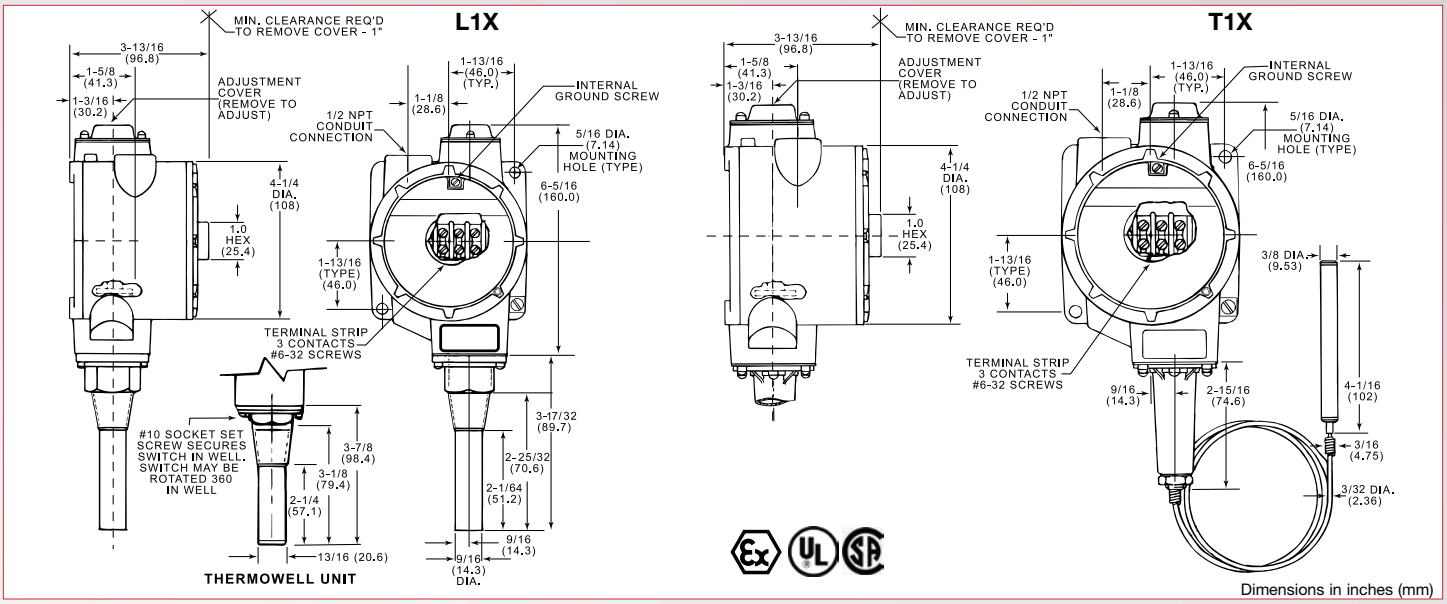
Technical Drawing



Dimensions in inches (mm)

Product Configurator

Example	H	T	1	X	-HH	251	S	-12	-A		

Hermetically Sealed

H	Hermetically sealed limit switch option - Class I, Division II (requires AA, CC, or HH limit switch)

Sensing Type

T	Remote bulb & capillary
L	Local mount

Set Point

1	Single setpoint (SPDT)
2[1]	Dual setpoint (2 SPDT)

Enclosure

X	NEMA 4, 7, & 9 explosion proof enclosure (Standard)

Limit Switch[2]

-H	10 amps @ 125/250 VAC; 3 amps @ 480 VAC (standard)
-B	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.05 amps @ 125 VDC; 0.03 amps @ 250 VDC
-G[3]	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.4 amps @ 125 VDC; MANUAL RESET (only available for T2X)
-J	10 amps @ 125/250 VAC; 3 amps @ 480 VAC (with elastomer boot)
-L	15 amps @ 125/250/480 VAC; 0.03 amps @ 125 VDC; 0.02 amps @ 250 VDC
-M	10 amps @ 125/250 VAC; 3 amp @ 480 VAC; 0.5 amps @ 125 VDC; 0.25 amps @ 250 VDC
-S	15 amps @ 125/250/480 VAC; 0.05 amps @ 125 VDC; adjustable differential [4]
-GH	1 amp @ 125VAC; gold contacts
-AA	Hermetically sealed; 4 amps @ 125/250 VAC
-CC	Hermetically sealed; 10 amps @ 125/250 VAC
-HH	Hermetically sealed; 5 amps @ 125/250 VAC

Wetted Material

Blank	Copper sensor
S	304 stainless steel

Capillary Length

Blank	6 foot capillary
-12	12 foot capillary
-25[5]	25 foot stainless steel capillary

Options

-RD[3]	Manual reset (must use when selecting "G" limit switch option) Only available on T2X
-EX[6]	ATEX certification
-Sxxx	Factory pre-set (consult factory)

Thermowell (Local Mount only)

-WS	316 stainless steel thermowell (local mount only)
-W	Brass local mount Thermowell

Armor Option (Bulb & Capillary only)

Blank	Blank if not required
-A	302 stainless steel armor

Temperature Range

Remote sensor ranges

Range	Adjustable Range				Media Temperature Limit (Proof)				Differential (Approx.) [2]	
	Low	High	Low	High	Low	High	Low	High	°F	°C
154	-50°F	+150°F	-45°C	+66°C	-100°F	+200°F	-73°C	+93°C	1° to 2°	.5° to 1.1°
251	+50°F	+250°F	+10°C	+121°C	-100°F	+300°F	-73°C	+149°C	1° to 2°	.5° to 1.1°
351	+150°F	+350°F	+66°C	+177°C	-100°F	+400°F	-73°C	+205°C	1° to 2°	.5° to 1.1°
601	+300°F	+440°F	+149°C	+227°C	0°F	+650°F	-18°C	+343°C	2° to 4°	1.1° to 2.2°
603	+320°F	+600°F	+160°C	+316°C	0°F	+650°F	-18°C	+343°C	2° to 4°	1.1° to 2.2°

Local mount sensor ranges

Range	Adjustable Range				Media Temperature Limit (Proof)				Differential (Approx.) [2]	
	Low	High	Low	High	Low	High	Low	High	°F	°C
201	-50°F	+75°F	-45°C	+24°C	-100°F	+250°F	-73°C	+121°C	1° to 3°	.5° to 1.6°
202	+15°F	+140°F	+9°C	+60°C	-100°F	+250°F	-73°C	+121°C	1° to 3°	.5° to 1.6°
203	+75°F	+200°F	+24°C	+93°C	-100°F	+250°F	-73°C	+121°C	1° to 3°	.5° to 1.6°
351	+100°F	+225°F	+38°C	+107°C	-100°F	+400°F	-73°C	+205°C	6° to 9°	3.3° to 5.0°
204	-50°F	+200°F	-45°C	+93°C	-100°F	+250°F	-73°C	+121°C	1° to 3°	.5° to 1.6°
354	+100°F	+350°F	+38°C	+177°C	-100°F	+400°F	-73°C	+205°C	6° to 9°	3.3° to 5.0°
454	+150°F	+450°F	+66°C	+232°C	0°F	+500°F	-18°C	+260°C	3° to 6°	1.6° to 3.3°

[1] Not available with local mount version.

[2] Changing limit switch will effect deadband; See sales drawing

[3] When selecting the manual reset option on dual setting switches (T2X), the manual reset limit switch will be on the high circuit. The low circuit limit switch must be specified by the customer. Only available with T2X.

[4] When selecting the 'S' adjustable differential limit switch option on a dual setting switch (T2X), a standard 'H' switch will be paired with an 'S' switch. Dual 'S' pricing will apply.

[5] Add 'S' wetted material adder and 'A' armor adder to this. Capillary length '25' requires stainless steel capillary and armor.

[6] ATEX certification is only available with 'S' stainless steel wetted material

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